



Post-Production Deductions Under Oil and Gas Leases

March 1, 2022



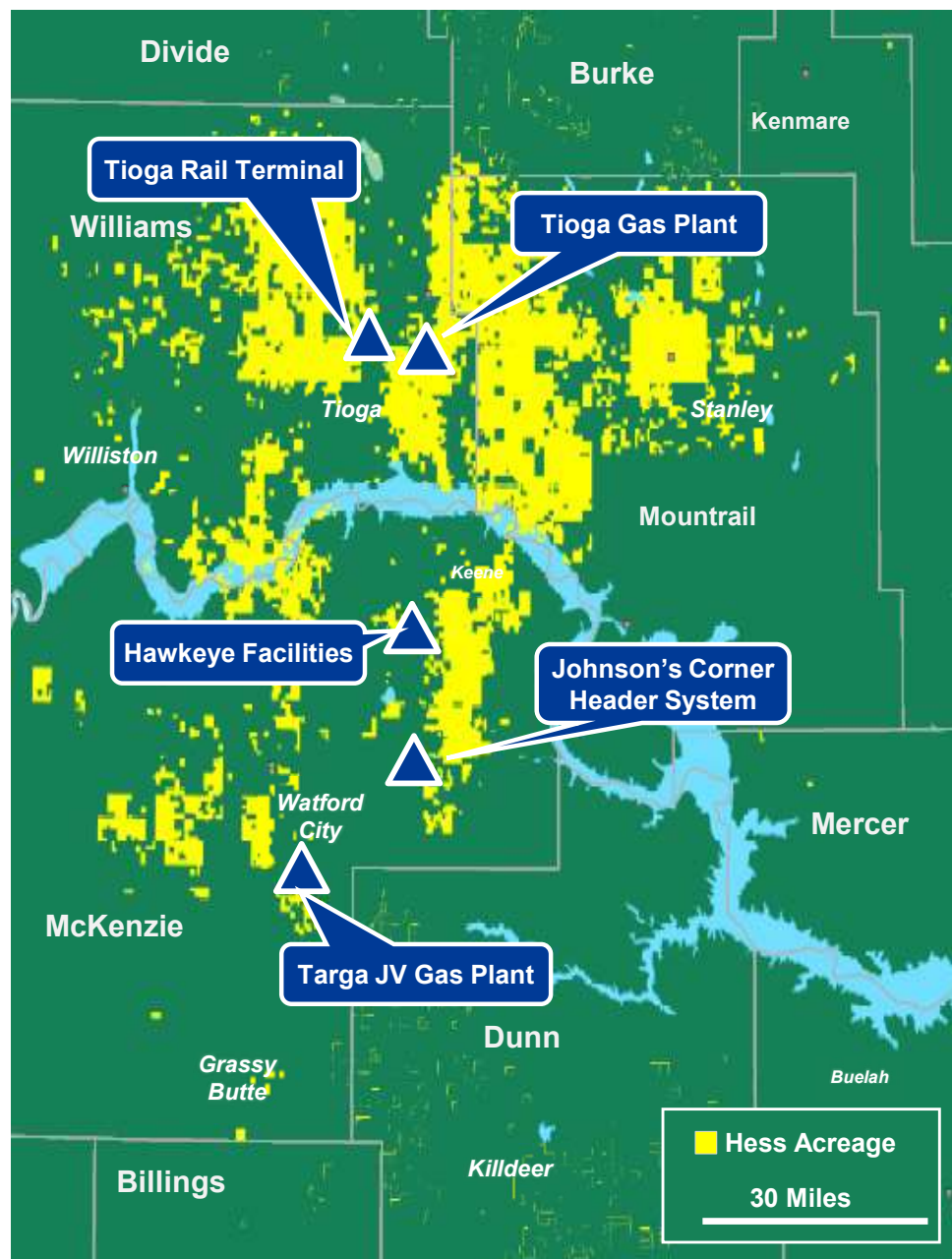
- Hess Corporation has operated in North Dakota for over 70 years, drilling its first well in 1951.
- Through its affiliate, Hess Bakken Investments, Hess operates over 1,600 wells in North Dakota, producing over 104,000 barrels of crude oil per day in 2021.
 - Since 2014, Hess has invested \$7.7B to drill for and produce oil in North Dakota.
 - Today Hess companies and contractors employ nearly 1,500 people across the state, making Hess one of the largest private employers in North Dakota.
- Since 2014, Hess has paid over \$2.3B to royalty owners.
 - Royalties are paid pursuant to approximately 20,000 oil and gas leases.
 - Bakken is an oil play. Over 90% of royalty value comes from oil sales.
 - Gas is a byproduct of oil production that must be addressed.
- In 2022, Hess plans to spend \$790MM for further drilling and production in North Dakota, making the Bakken the exclusive shale focus of Hess.

Why HESM in North Dakota?



- In January 2014, the price of oil was over \$100 per barrel, with over 175 rigs running in the Bakken.
- North Dakota was facing a serious problem of flared gas in the state: over 30% of produced gas was being flared in 2014.
- Governor Jack Dalrymple challenged industry to invest in infrastructure to solve the problem.
- Such investment came when Hess formed Hess Midstream (“HESM”) in 2014 and brought in a partner, Global Infrastructure Partners, in 2015.
 - Today HESM is a publicly traded company in which Hess owns a 42% interest.
 - HESM owns and/or operates gathering systems, oil terminals, compression facilities, rail facilities, and gas processing plants in North Dakota.
 - Long-term commitments for HESM to provide reliable, “firm” services to Hess wells.
- HESM midstream services have helped Hess exceed the state’s 91% gas capture target, with a current capture rate of 95%.

HESM Infrastructure in North Dakota



- HESM has invested over \$2B in midstream infrastructure since 2014 that includes:
 - The Tioga Gas Plant, which handles gas processing and fractionation up to 400,000 mcf/day with about 80,000 barrels/days of NGL throughput capacity.
 - The LM4 Gas Plant, up to 100,000 mcf/day.
 - ~1,350 miles of gas/NGL gathering.
 - 550 miles of oil gathering pipelines.
 - 325,000 mcf/day of gas compression across 12 compressor stations.
 - Crude oil terminals with a total capacity of approximately 525,000 barrels per day.
- Importantly, HESM provides “Firm” services to Hess operated wells.
- Allowing Hess to reliably produce oil with minimal curtailment because of gas capture.

- Senate “shall consider studying deductions for postproduction costs under oil and gas leases.”
- First, consider leasing and why mineral owners negotiate and agree upon oil and gas leases.
- Then, consider:
 - “the methods used to calculate the value of oil and gas”;
 - “the point of sale used to determine the value”;
 - “oil and gas sales in the absence of an arm’s length contract”;
 - “any deductions or incentives applied to value”; and
 - “methods used to report any deductions or incentives on mineral royalty statements.”
- In addition, consider “state-mandated natural gas capture targets.”

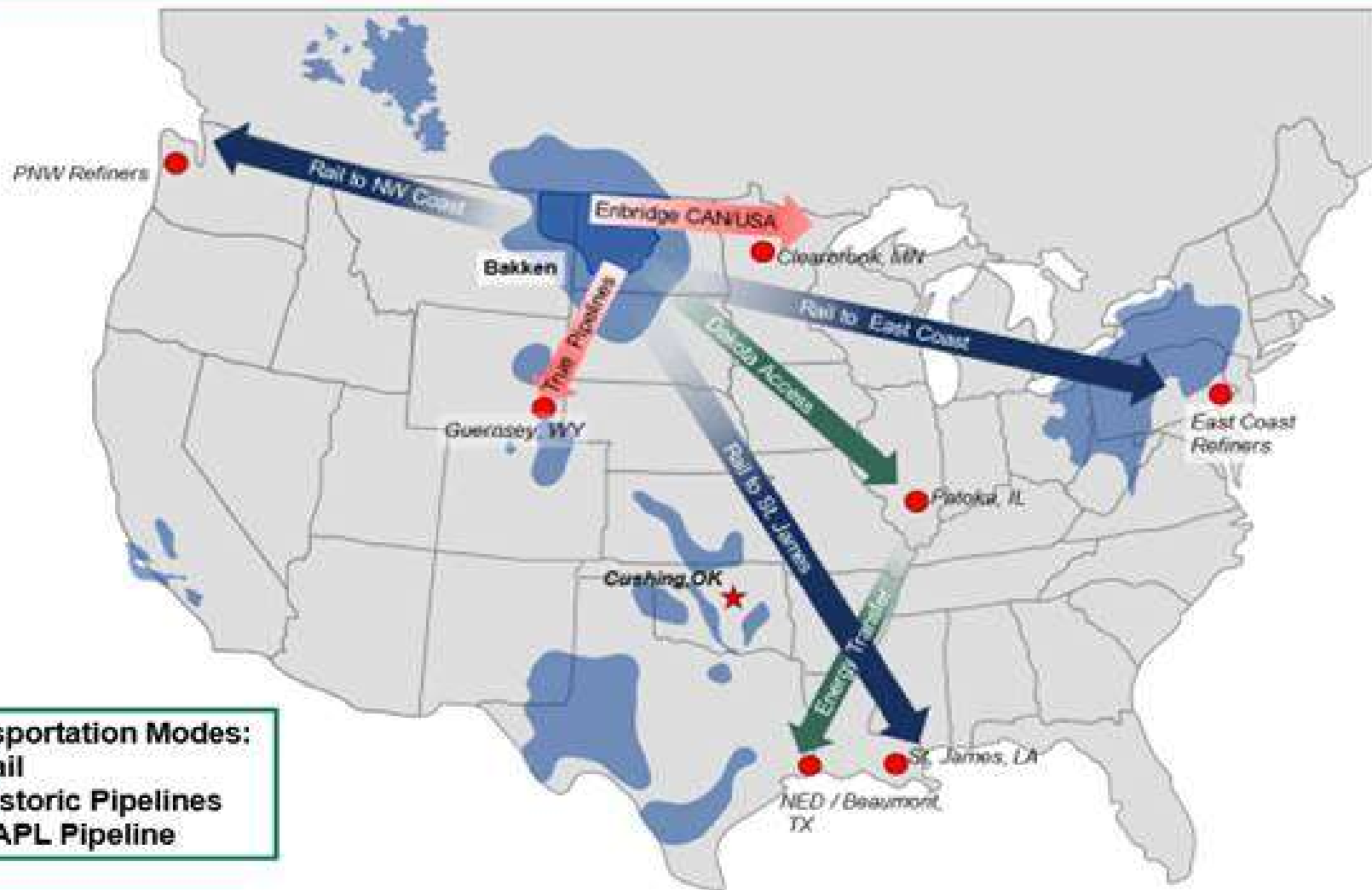
Oil and Gas Leases

- Royalty owners often negotiate Leases to secure benefits, including:
 - Upfront per acre signing bonus to enter the Lease;
 - Royalty percentage, point of valuation, and prohibited deductions;
 - Increases or specifications as to how royalties are paid;
 - If applicable, permitted surface uses, including where drilling may occur;
 - Minimum or shut-in royalties when a unit is not producing; and
 - Water use and associated payment.
- The Lease then governs the relationship between the royalty owner (“Lessor”) and working interest owner (“Lessee”) for as long as oil and gas is produced.
- The Operator of a unit pays royalties in accordance with the terms of the Lease.

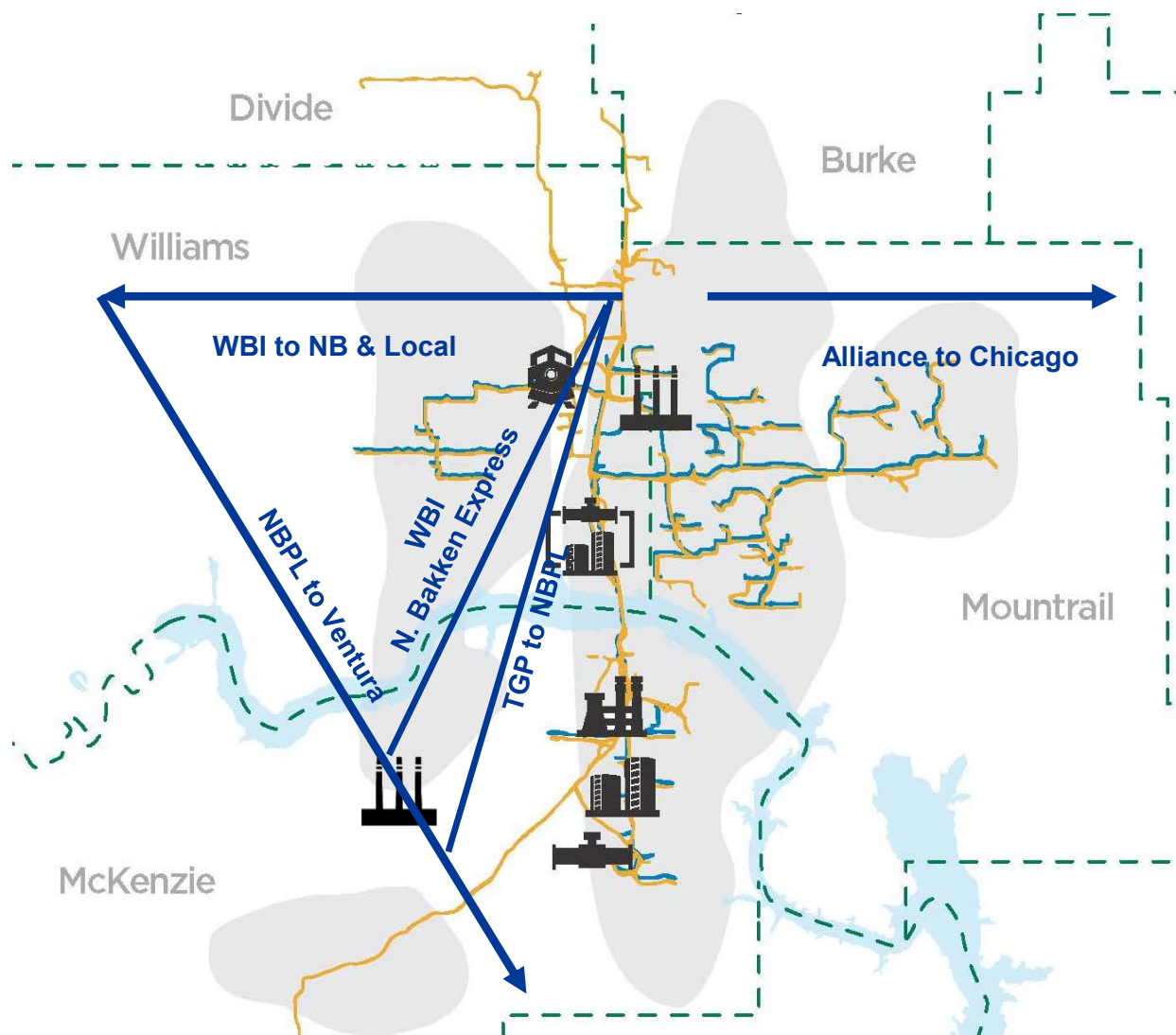
Methods Used to Calculate Value of Oil and Gas

- First, what does the Lease say?
 - The Lease will set the point of valuation for royalty.
 - The Lease will state if prohibitions exist against post-production deductions.
 - Royalties are paid according to the Lease terms.
- Royalties are typically valued using the weighted average sales price, as anticipated in the royalty reporting statute NDAC 43-02-06-01.
 - For each product, take the total proceeds from downstream sales to third parties, divided by the volumes sold, minus those deductions permitted under the Lease.
 - NGLs are prepared by product - Ethane, Propane, Butane, and Natural Gasoline.

North Dakota Crude Oil Markets



Point of Sale Used to Determine Gas Value



Residue Gas Pipelines (in service)

Deductions or Incentives on Mineral Royalty Statements



- NDAC 43-02-06-01 governs reporting on mineral statements.
- Under the statute, an operator must provide, among other information:
 - Volumes and weighted average price of oil and gas sold;
 - Amount of each deduction made, identified as
 - **Transportation**, meaning the costs to move the product via pipeline, truck, or rail to market and sales to third parties.
 - **Compression**, gas only, meaning to gather the gas via pipeline from the well to a processing plant and to pressurize the pipeline so that the gas will move.
 - **Processing**, gas only, meaning to remove impurities from the raw gas stream and, when available, fractionate into the separate gas and NGL products.
 - **Administrative**, a charge not applicable to royalty owners.
- When the Lease sets valuation at the well, costs incurred to move products beyond the well, for a better price, are deducted as transportation, compression, or processing.
- Hess practice is that royalty owners do not go negative on the combined gas stream, thus preserving in full the oil revenue.
- If Hess has committed to ship minimum volumes on a pipeline or for processing, those minimum volume commitments are not passed to royalty owners.

State-Mandated Natural Gas Capture Targets



- Capturing gas from oil production requires significant investment and cost.
- The alternative is to curtail production and produce less oil, but that diminishes value for all stakeholders – producers, royalty owners, and the State.
- Without significant investment in infrastructure to handle the gas produced with the oil, North Dakota will not realize the full benefit of its oil resources.
- Since 2017, industry has made strides toward reducing flaring, and Hess has been exceeding the state's 91% gas capture target.
- Hess has endorsed the World Bank's "Zero Routine Flaring" Initiative with plans to reach zero routine flaring by 2025.
- To keep oil flowing, industry must continue its focus on capturing the gas that is produced with oil so that royalty owners achieve the highest value from the oil produced.



- Hess is well positioned to optimize value for royalty owners in a higher price environment.
 - Commitments from HESM to provide “Firm” takeaway to Hess wells;
 - Not just firm, but also reliably “ahead of the drill bit,” allowing more immediate gas capture;
 - While Hess continues to reduce flaring in North Dakota, reaching zero routine flaring by 2025;
 - Advantaged export options offered by HESM optimize oil royalty revenue through access to higher priced markets; and
 - Hess practice is that royalty owners do not go negative on the combined gas stream, thus preserving in full the oil revenue.
- Leases with mineral owners will continue to set forth royalty valuation.
- NDAC 43-02-06-01 will continue to set forth royalty reporting.



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